OIPE JC29 MAR 11 2004 PATENT & TRADEMARK OFFICE

PTO/SB/21 (08-03)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/680,629
Filing Date	6-OCT-2003
First Named Inventor	Mody, Apurva
Art Unit	2185
Examiner Name	
Attorney Docket Number	0701-2765

Total Number of Pages in This Submission

ENCLOSURES *(Check all that apply)*

- [✔] Fee Transmittal Form
  - [✔] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [✔] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] After Allowance communication to Group
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to Group **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [✔] Other Enclosure(s) (please Identify below):

Remarks

Recordation Form Cover Sheet and Assignment of Utility Patent Application
Return Receipt Postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Nora M. Tocups, Esq.
Signature	Nora M. Tocups
Date	March 8, 2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Nora M. Tocups, Esq.		
Signature	Nora M. Tocups	Date	Mar. 8, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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OIPE JC26
MAR 11 2004
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	**Apurva Mody et al.**	)	
		)	
Serial No.:	**10/680,629**	)	Art Unit:
		)	
Filed:	**October 06, 2003**	)	Examiner:
		)	
For:	**Sample Time Offset Detection, Correction and Control for MIMO OFDM Systems**	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir or Madam:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants identify the documents listed on the accompanying form PTO/SB/08A. Copies of the publications listed are enclosed for your review.

Remarks

Applicants do not concede that the identified materials constitute prior art within the meaning of the United States patent laws.

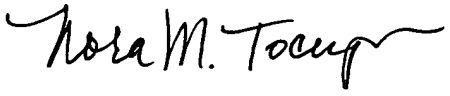
CERTIFICATE OF MAILING

I hereby certify that this document, together with any document referred to as enclosed or attached, is being deposited with the United States Patent and Trademark Office via First Class Mail to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 8, 2004.

Nora M. Tocup

This Information Disclosure Statement is being filed before the mailing of the first Office Action on the merits (37 C.F.R. 1.97(b)(3)); therefore, no fee is believed to be required.

Respectfully submitted,



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404-372-1430
Attorney Docket No. 0701-2765

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	10/680,629
Filing Date	10/06/03
First Named Inventor	Mody et al
Art Unit	2185
Examiner Name	
Attorney Docket Number	0701-2765

OIPE MAR 11 2004 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No.[1]	Document Number: Number - Kind Code[2] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-5,732,113	03-24-1998	Schmidl et al	
		US- 6,035,003	03-07-2000	Park et al	
		US- 6,314,083	11-06-2001	Kishimoto et al	
		US- 6,539,063	03-25-2003	Peyla et al	
		US- 6,587,526	07-01-2003	Li et al	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3] - Number[4] - Kind Code[5] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	10/680,629
Filing Date	10/06/03
First Named Inventor	Mody et al.
Group Art Unit	2185
Examiner Name	
Attorney Docket Number	0701-2765

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		LUISE, MARCO;Low-Complexity Blind Carrier Frequency Recovery for OFDM Signals Over Frequency-Selective Radio Channels; IEEE Transactions on Communications; Vol. 50, No. 7; July, 2002.	
		KELLER, THOMAS; PIAZZO, LORENZO; MANDARINI, PAOLO; HANZO, LAJOS; Orthogonal Frequency Divison Multiplex Synchronization Technique for Frequency-Selective Fading Channels; IEEE Journal on Selected Areas in Communication; Vol 19, No. 6; June, 2001.	
		YANG, BAOGUO; LATAIEF, KHALED BEN; CHENG, ROGER S.; CA, ZHIGANG; Timing Recovery for OFDM Transmission; IEEE Journal on Selected Areas in Communication; Vol. 18, No. 11; November, 2000.	
		HONAN, PATRICK; TURELI, UFUK; Blind Carrier Offset Estimation for MIMO OFDM Systems Carrier Rao Bound and Nonlear Least Squares; 2003 Conference on Information Sciences and Systems; Johns Hopkins University; March, 2003.	
		ABHAYAWARDHANA, V.S.; WASSELL, I.J.; Residual Frequency Offset Correction for Coherently Modulated OFDM Systems in Wireless Communication; Department of Engineering, University of Cambridge, UK, 2001.	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
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